

REMARKS

Responsive to the Official Action mailed June 5, 2003, applicants have further amended the claims of their application in an earnest effort to place this case in condition for allowance. Specifically, independent claim 1 has been amended. Reconsideration is respectfully requested.

In the Action, the Examiner objected to the specification, with reference to disclosure of thickness in terms of basis weight. While it is respectfully submitted that those skilled in the art will readily appreciate that a specified basis weight of a particular material necessarily recites a corresponding thickness, the specification has been revised, at page 4, to use the term "basis weight" with reference to the corresponding disclosure. It is believed that this objection can now be withdrawn, and that applicants' previously revised claims find clear support in the specification. However, applicants would be pleased to consider any other revisions the Examiner deems appropriate.

In rejecting the claims under 35 U.S.C. §103, the Examiner has relied upon U.S. Patent No. 5,308,691, to Lim et al. However, as discussed in applicants' previous response, it is respectfully maintained that this reference neither teaches nor suggests a *nonwoven/film laminate*, as specifically disclosed and claimed in the present application, and accordingly, the Examiner's rejection is respectfully traversed.

In the Action, the Examiner has acknowledged that the principal Lim et al. reference differs from the present invention in that Lim et al. does not state that it

contemplates the inclusion of a "film" layer in the disclosed laminate. Applicants agree with this assessment in the shortcomings in the teachings of Lim et al., since this patent is clearly limited in its teachings to the formation of laminate constructs solely from nonwoven fabric layers, without the inclusion of any *monolithic* film. While applicants note the dictionary definition referred to by the Examiner, it is respectfully submitted that those skilled in the art *do not* equate monolithic films with fibrous or filamentary nonwoven fabrics, and accordingly, applicants must respectfully maintain that Lim et al. clearly does not teach or suggest applicants' claimed invention. For the Examiner's convenience reference, applicants enclose herewith selected pages from *Introductory Textile Science*, 5th Edition (1986) which discusses nonwoven fabrics and film constructs. As noted at page 256 of this publication, the term "nonwoven", as used in the expression "nonwoven fabrics", "has become widely accepted to include traditional felt, needlepunched felts, adhesive-bonded fabrics of various types, and various special structures that do not use yarn". The text goes on to state:

The definition of nonwoven fabric as stated by ASTM limits nonwoven structures to those made of textile fibers: 'A textile structure produced by bonding or interlocking of fibers, or both, accomplished by mechanical, chemical, thermal, or solvent means and combinations thereof'.

In commenting on this definition, the text states:

According to this definition, the starting raw material for any nonwoven, is a mass of *textile fibers*. These fibers may be natural, man-made, or combinations thereof, or *fibrous forms obtained by various processing of films* (emphasis applied).

As will be appreciated, this publication makes clear that nonwoven fabrics are *fibrous* in nature, with discussion clearly differentiating *fibrous material* from *films*.

At page 272, "film fabrics" are discussed. The publication states:

Films are not true textiles *since they are not made from fibers*; however, they are made from the same generic polymers used for many man-made fibers (emphasis supplied).

The publication goes on to further discuss the nature of films, and their differentiation from fibrous fabric structures.

Thus, it is respectfully maintained that the Lim et al. reference is devoid of any teachings which suggest applicants' invention as claimed, formed from a monolithic film and an associated nonwoven fabric.

In applicants' specification, at page 1, use of the present nonwoven fabric/film laminate as a "housewrap" is discussed. In this regard, requirements for such an application are identified as including "impermeability to liquid water as measured by the absence of leaks when the housewrap material is subjected to a given hydrostatic head" (page 1, lines 21-22). In the "Summary Of The Invention" of applicants' specification, the present invention is discussed, with particular reference to its ability to be economically manufactured for economical use, as well as its "exceptional hydrostatic head performance" (page 3, line 26). Such performance is evident when compared to a housewrap construct formed in accordance with the principal Lim et al. reference. In Example 1 of Lim et al., referencing a "Two Layer Composite For Housewrap

Application", a construct formed from two nonwoven fabric layers, *without any monolithic film as in the present invention*, is described and tested. As noted in at column 6, Table 1, hydrostatic head for the composite structure is specified as 0.86 meters (86 centimeters). In significant distinction, as stated at page 9, line 2, of applicants' specification, material formed in accordance with the present invention has been found to exhibit a hydrostatic head *in excess of 125 centimeters* (per test method AATCC-127, the same test method specified in Lim et al., column 5, line 23).

It is respectfully maintained that the present invention is clearly patentably distinct from the teachings of Lim et al. Lim et al. clearly fails to teach or suggest the formation of a composite structure formed from a nonwoven fabric and monolithic film constructs, as claimed, with the resultant increase in hydrostatic head performance being clearly evident from the AATCC-2 test data set forth in Lim et al. and the present application. In clear distinction from any teachings in Lim et al., the present composite structure achieves the desired vapor permeability by employing a monolithic film in the form of an acrylic/polyester breathable coating which, as specifically claimed, "exhibits substantial impermeability to liquid, water, and to air, while significant permeability to water vapor".

In view of the foregoing, formal allowance of claims 1-13 is believed to be in order and is respectfully solicited. Should the Examiner wish to speak with applicants' attorneys, they be reached at the number indicated below.

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Amendment dated 09/04/2003
Reply to Office Action of 06/05/2003

The Commissioner is hereby authorized to charge any additional fee which may be required in connection with this submission to Deposit Account No. 23-0785.

Respectfully submitted,

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